

AMENDMENTS TO CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (currently amended) A high-resolution still picture decoding device, comprising:
a memory device having a bit-stream buffer, a temporary buffer and a frame buffer, the bit-stream buffer being adapted to store bit-stream data from a storage media; and
a decoding means for decoding the bit-stream data in the bit-stream buffer and storing decoded frame data in the frame buffer or the temporary buffer, such that, when a still picture is to be displayed, the frame buffer stores part of the frame data corresponding to the still picture and the temporary buffer is provided to store the other frame data which is decoded in real time as the still picture is displayed, and the data in the frame buffer and temporary buffer is output for displaying a high-resolution still picture,

wherein the frame data in the bit-stream buffer is represented by multiple macroblock lines after being decoded by the decoding means, the frame buffer only stores a portion of the macroblock lines corresponding to the frame data of the still picture, and the temporary buffer stores at least one other macroblock line.

Claim 2. (currently amended) The high-resolution still picture decoding device as claimed in claim 1, wherein the frame buffer stores only a half of the frame data corresponding to the picture, and the temporary buffer has a memory space less than that of the frame buffer.

Claims 3 and 4 (canceled)

Claim 5. (original) The high-resolution still picture decoding device as claimed in claim 4, wherein the frame buffer stores even numbered macroblock lines corresponding to the frame data of the picture.

Claim 6. (original) The high-resolution still picture decoding device as claimed in claim 5, wherein the macroblock lines in the temporary buffer has a height half of the height of the macroblock lines in the frame buffer.

Claim 7. (original) The high-resolution still picture decoding device as claimed in claim 5, wherein, for a field of a displaying still picture and in a time point of switching to display the still picture, the bit-stream of a frame from the bit-stream buffer is processed by a first decoding process in one field display time of a top field to decode the even numbered macroblock lines, and the decoded frame data is stored in the frame buffer, while in one field display time of the other fields, the bit-stream of a frame from the bit-stream buffer is processed by a second decoding process to decode the odd numbered macroblock lines.

Claim 8. (currently amended) The high-resolution still picture decoding device as claimed in claim 7[[1]], wherein the second decoding process is repeatedly executed and there are two pointers for setting a picture range in which read operations of bit-stream data are ~~can be~~ cyclically repeated.

Claim 9. (original) The high-resolution still picture decoding device as claimed in claim 8, wherein the decoding means has an image decoder which comprises a variable-length decoder, a run-length decoder, an inverse quantizer and an inverse discrete cosine transform unit, and data read out from bit-stream buffer is processed by the variable-length decoder, run-length decoder, inverse quantizer, and inverse discrete cosine transform unit sequentially for being stored in frame buffer or temporary buffer.

Serial Number 09/657,585

Claim 10. (currently amended) The high-resolution still picture decoding device as claimed in claim 9, wherein the variable-length decoder ~~can discard~~ discards unnecessary macroblock lines for decoding.

Claim 11. (original) The high-resolution still picture decoding device as claimed in claim 9, wherein the image decoder further comprises a DC predictor for preserving DC component of the bit-stream data processed by the variable-length decoder.

Claim 12 (original) The high-resolution still picture decoding device as claimed in claim 9, wherein, only data of one field is determined by the inverse discrete cosine transform for being stored into the temporary buffer.

Claim 13 (original) The high-resolution still picture decoding device as claimed in claim 1, further comprising a multiplexer which select data in the frame buffer or the temporary buffer to output.